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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/517,318

03/09/2005

Kinshiro Naito

P26399

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7055 7590 09/26/2007  
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EXAMINER

LUK, EMMANUEL S

ART UNIT

PAPER NUMBER

1722

NOTIFICATION DATE

DELIVERY MODE

09/26/2007

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com  
pto@gbpatent.com

## Office Action Summary

Application No.

10/517,318

Applicant(s)

NAITO ET AL.

Examiner

Emmanuel S. Luk

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 4, 9-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keyes (3710666) in view of Bezama (5907985).

Keyes teaches the die body 25 with die hole 26, lower portion of the die hole forming a discharge hole 13, 27, annular peripheral groove 28 and injection port 30, the cross-sectional area of the injection port is smaller than the peripheral groove, see Fig. 2, 4, and the die holder can be 11, 41.

Keyes fails to teach an outer piece fitted into the through hole or hole-forming tool that is formed on the inner peripheral surface of the die body, or seal, and a separate core.

Bezama teaches a die body 38 that is the support bushing having a through and discharge hole 36, and piece having the discharge hole/air injection hold 10, that is fitted within the die body. Bezama also teaches in Figure 2, a prior art where there is a die body 38 and a core 23, the upper and lower portion formed by the die body and core at interfaces 25 and 41 acts as a seal to prevent flow to pass through.

It would have been obvious for one of ordinary skill in the art to modify Keyes with the die body configuration including a die body and core located within as taught by Bezama because it allows a better seal (c. 3, l. 18-20) via the upper and lower contact portions. It would have been obvious for one of ordinary skill in the art to add additional seal members at those interfaces for an improved seal.

4. Claims 1-4 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2000-051966 in view of Andrusch (5111723).

JP '966 teaches the die body 6, die holder 8, negative pressure generator via the downwardly facing inflow ports 3, the die holder having the fluid supply hole 9, 13. The die body 8, 10, 11, a core within the body 6 that is within the die body and having a discharge hole, core having a plurality of fluid injection ports 3 that are obliquely injecting fluid downward, the die body providing an inflow port 13 with an outer peripheral groove 9.

As seen in the figures, the through hole and the discharge hole are all tapered. It would have been obvious to one of ordinary skill in the art to recognize the elements of 8, 10, and 11 can be considered as a single element of the die body.

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JP fails to teach the seal and die body with core.

Andrusch teaches a die body 38 that is the support bushing having a through and discharge hole 36, and core having the discharge hole/air injection hold 42, that is fitted within the die body. In addition, the upper and lower portion formed by the die body and core at interfaces 25 and 41 acts as a seal to prevent flow to pass through.

It would have been obvious for one of ordinary skill in the art to modify JP with including a die body and core located within as taught by Andrusch because it allows a better seal (c. 3, l. 18-20) via the upper and lower contact portions. It would have been obvious for one of ordinary skill in the art to add additional seal members at those interfaces for an improved seal. In regards to the material made from resin, this is a common material used for forming elements and it would have been obvious for one of ordinary skill in the art to construct the element from resin.

In regards to the inclined angles, JP '966 teaches an inclined angle that is oblique. It would have been obvious to one skilled in the art that the various angles through routine experimentation for optimum results.

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1-4 and 6-17 have been considered but are moot in view of the new ground(s) of rejection.

The new rejection includes the Andrusch reference that also teaches a die body with core and also fluid injection ports. The arguments of the applicant's have been

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considered, however, new rejections are made in light of the arguments and the newly amended claims that have to be addressed.

### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emmanuel S. Luk whose telephone number is (571) 272-1134. The examiner can normally be reached on Monday-Fridays from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra N. Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EL

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